

This Page Is Inserted by IFW Operations  
and is not a part of the Official Record

## **BEST AVAILABLE IMAGES**

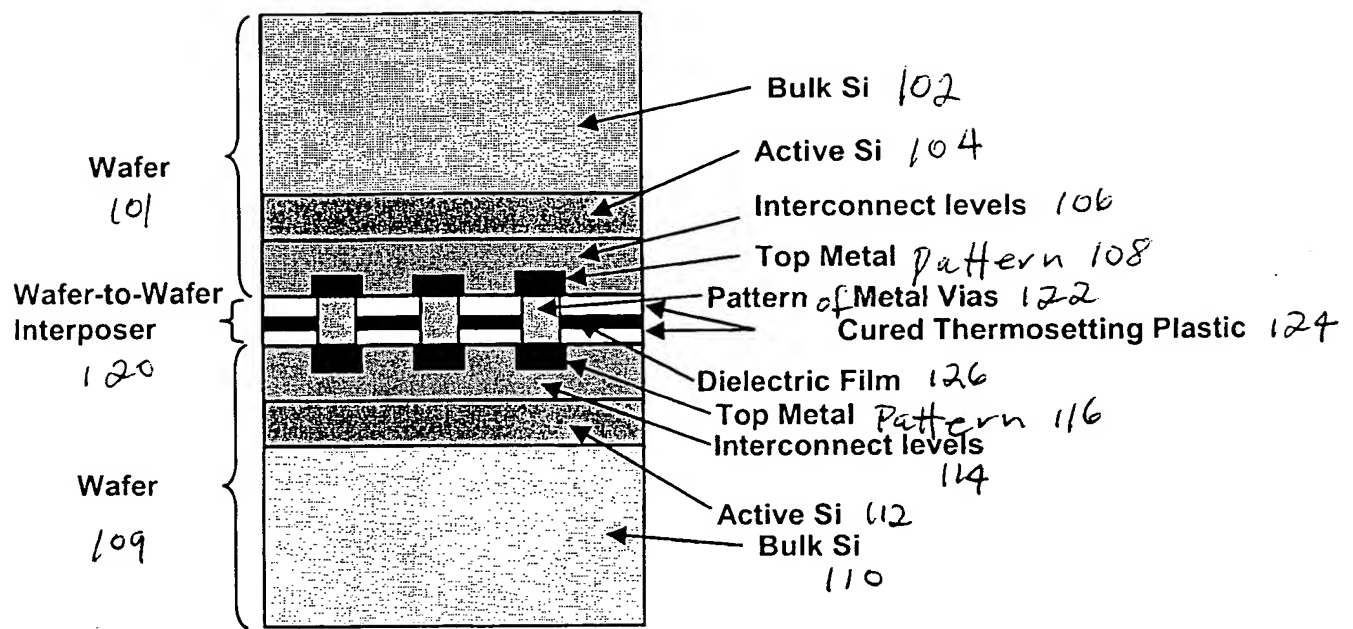
Defective images within this document are accurate representations of the original documents submitted by the applicant.

Defects in the images may include (but are not limited to):

- BLACK BORDERS
- TEXT CUT OFF AT TOP, BOTTOM OR SIDES
- FADED TEXT
- ILLEGIBLE TEXT
- SKEWED/SLANTED IMAGES
- COLORED PHOTOS
- BLACK OR VERY BLACK AND WHITE DARK PHOTOS
- GRAY SCALE DOCUMENTS

**IMAGES ARE BEST AVAILABLE COPY.**

**As rescanning documents *will not* correct images,  
please do not report the images to the  
Image Problem Mailbox.**



200

Figure 2

Remove bottom release layer from pre-assembly interposer 300

~ 202

Align the pattern of metal vias 122 with the metal pattern 116 on the wafer 109

~ 204

Laminate pre-assembly interposer 400 to the wafer 109

~ 206

Remove top release layer from the pre-assembly interposer 400

~ 208

Align metal pattern 108 with the pattern of metal vias 122

~ 210

Cure uncured thermosetting plastic film 306 bond wafer 101 with the wafer 109; electrically couple the metal pattern 108 to the metal pattern 116

~ 212

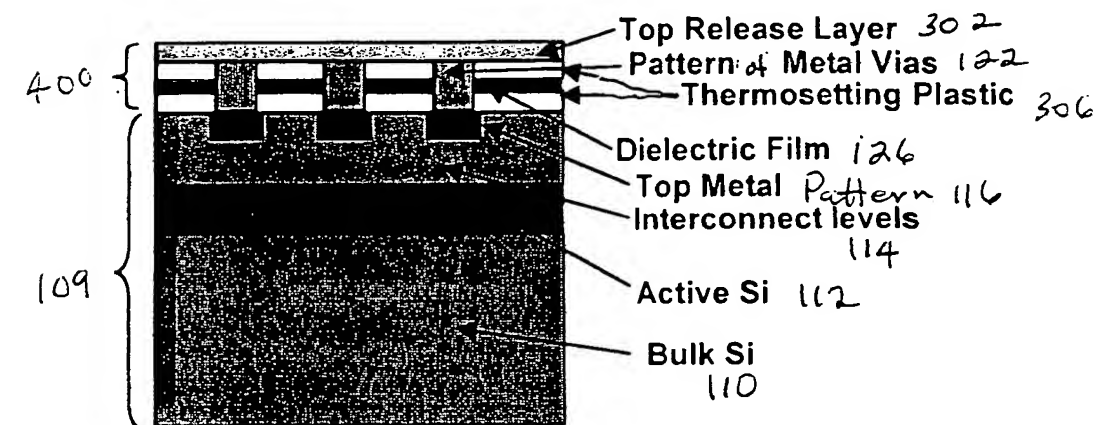
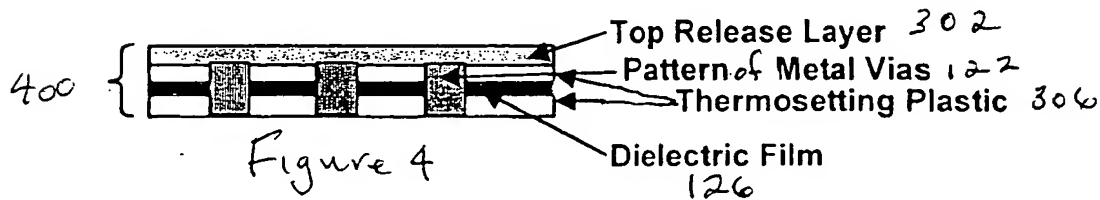
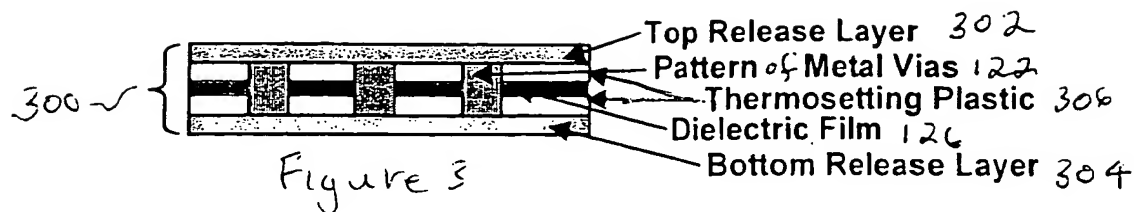


Figure 5

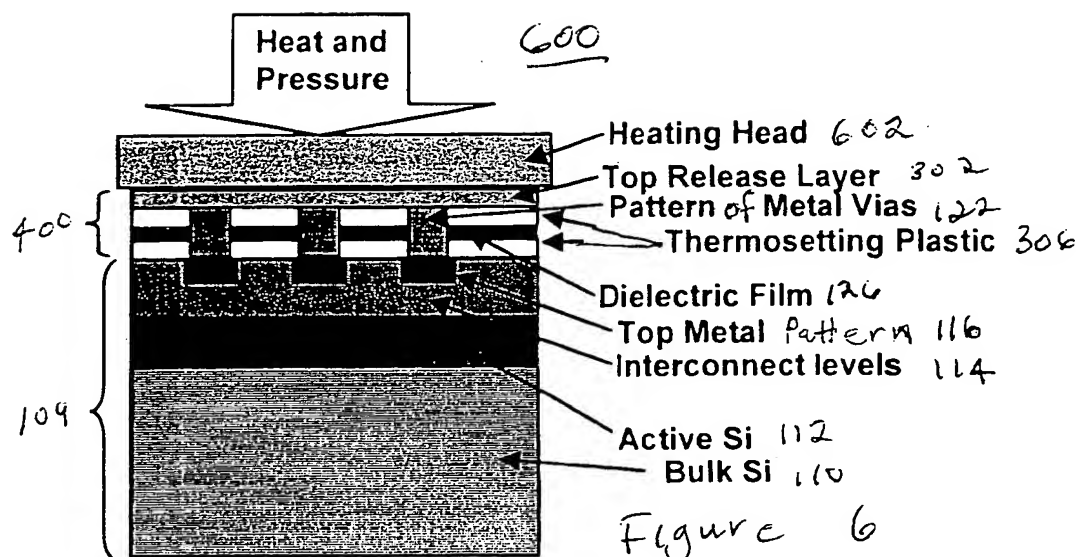


Figure 6

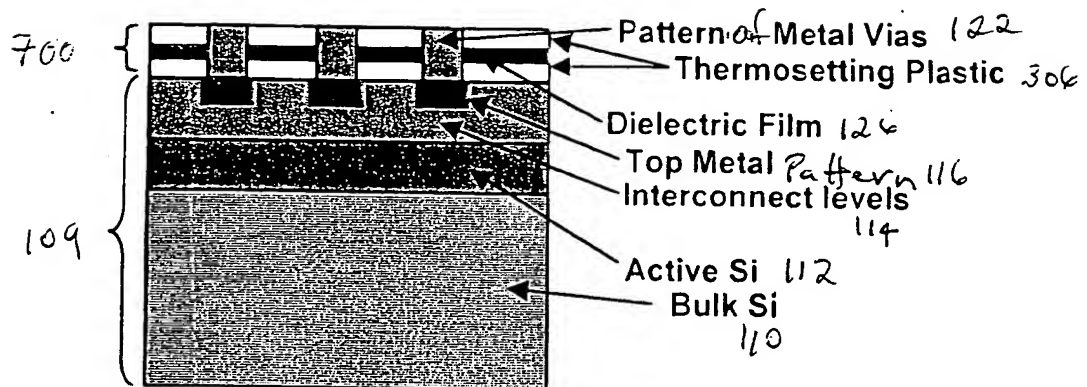


Figure 7

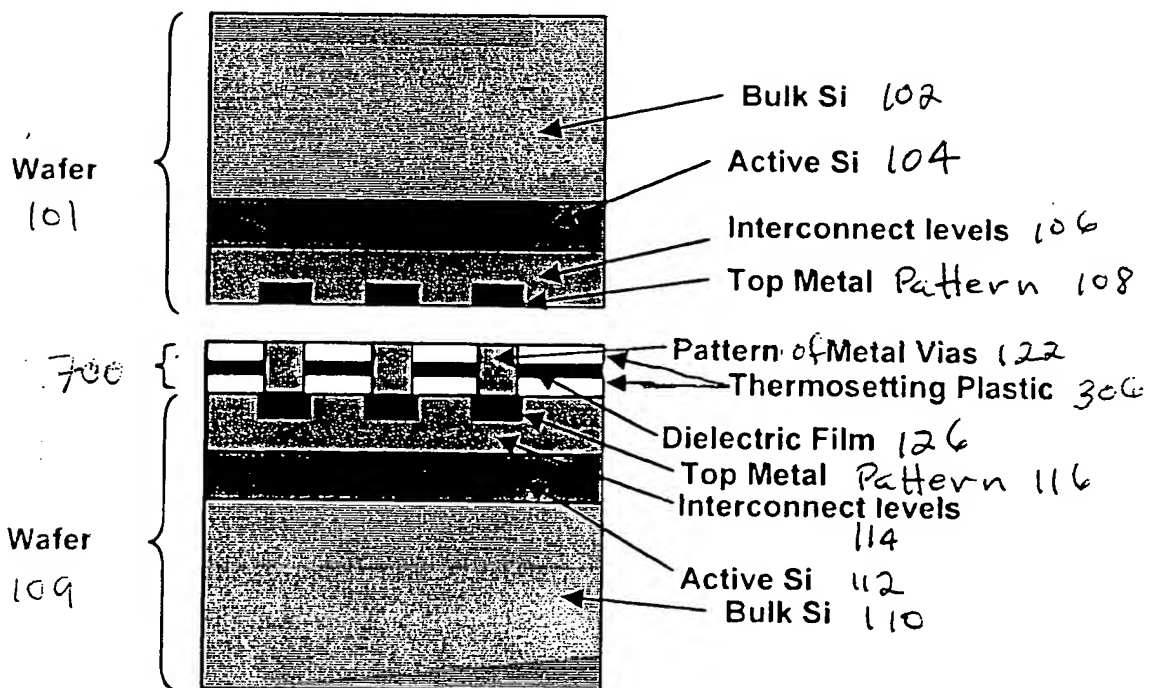


Figure 8

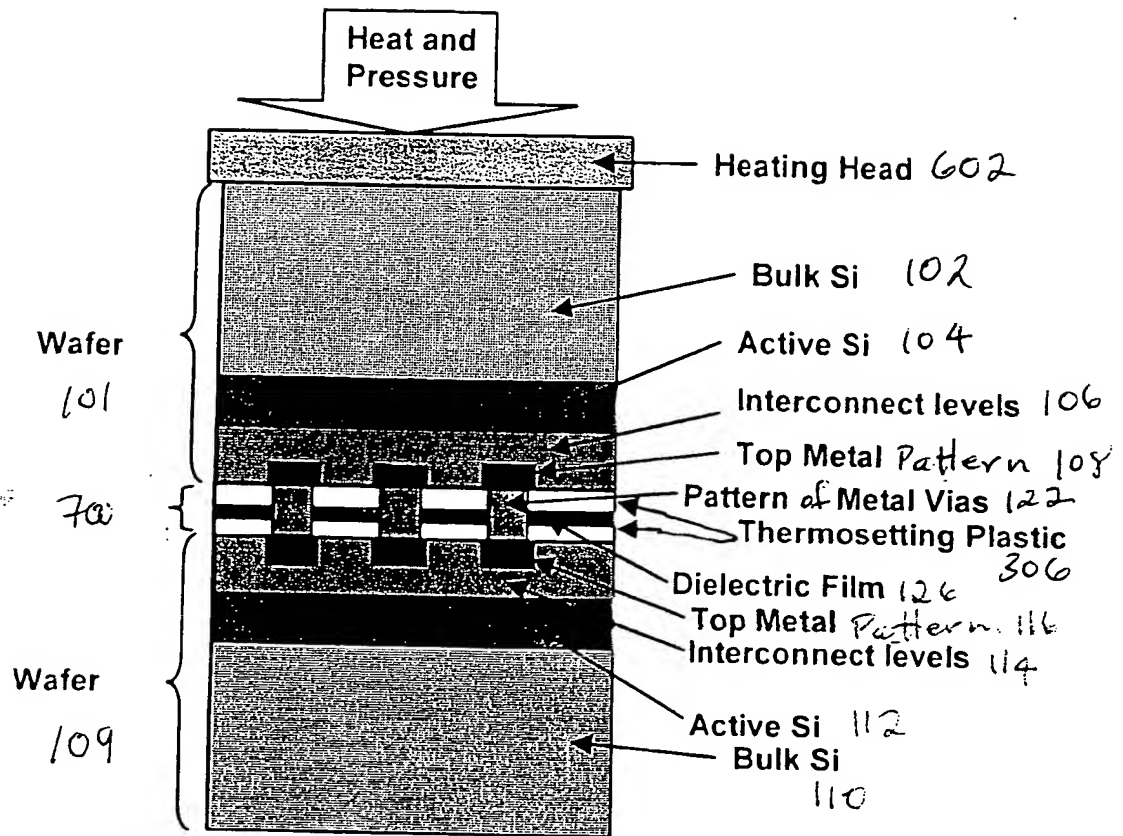
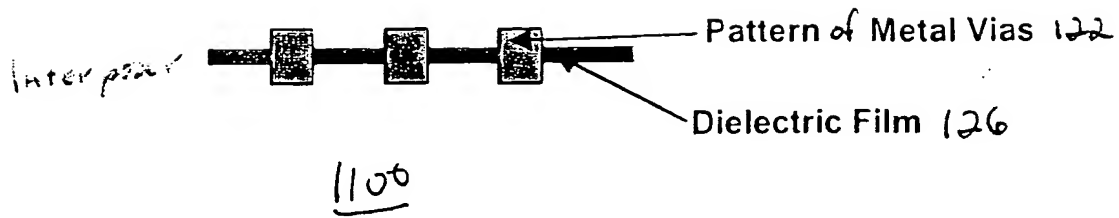


Figure 9

Figure 11



Align pattern of metal vias 122 with the metal pattern 108 and the metal pattern 116

~ 1002

Heat the assembly 1200 is heated to electrically couple the metal pattern 108 to the metal pattern 116

~ 1004

Dispose a thermosetting plastic in liquid or fluid form in the gaps 1304 and/or 1306 and cure thermosetting plastic

~ 1006

Figure 10 1000

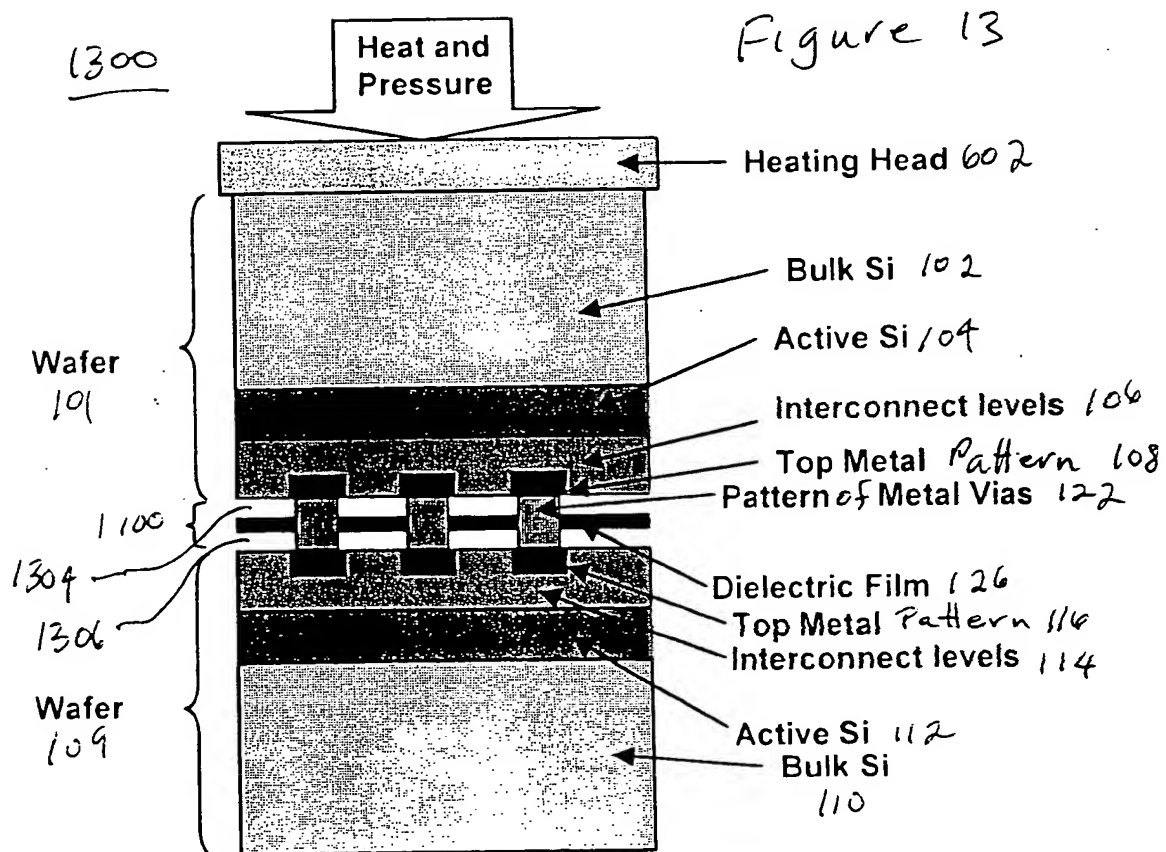
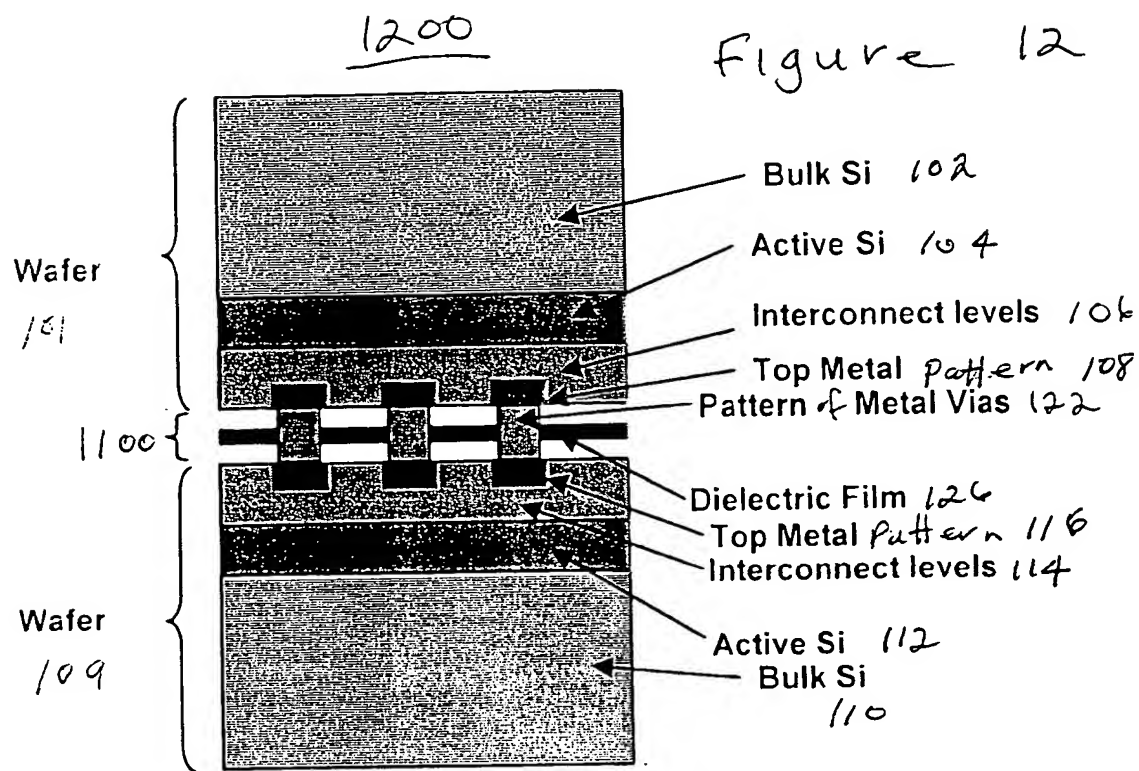


Figure 14 1400

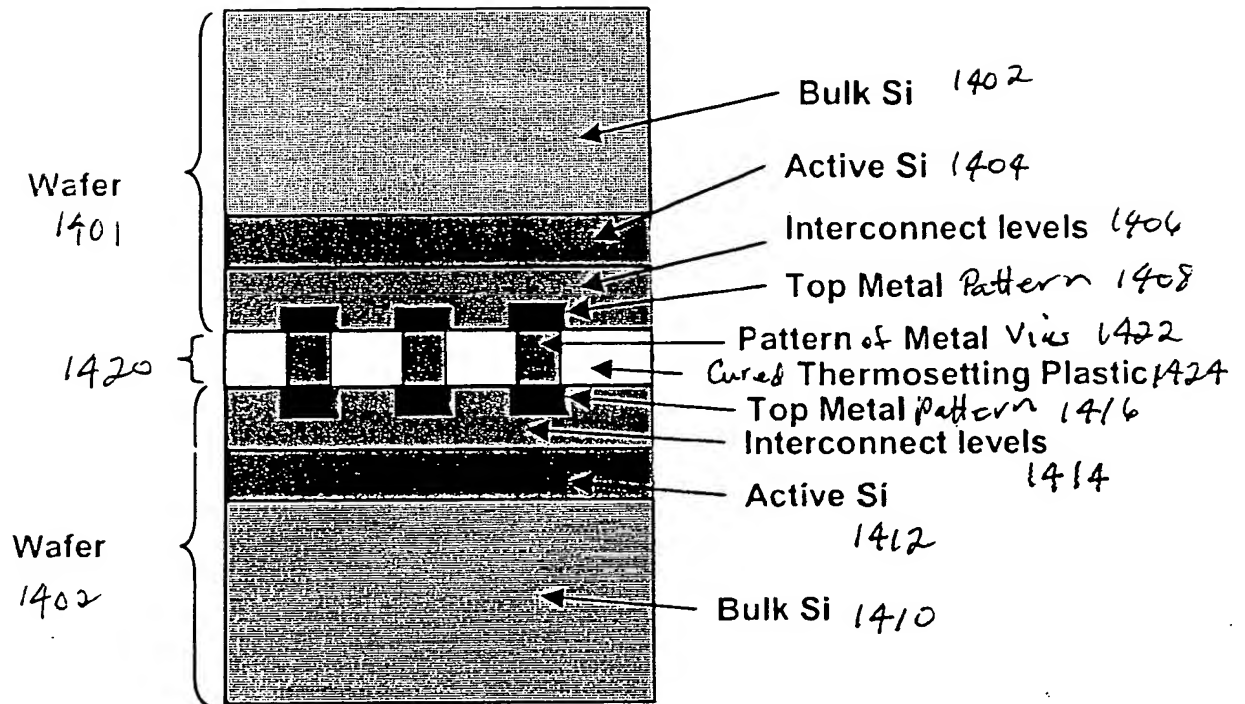
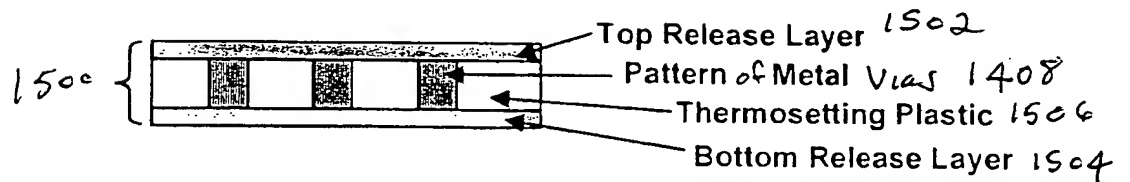


Figure 15





1600

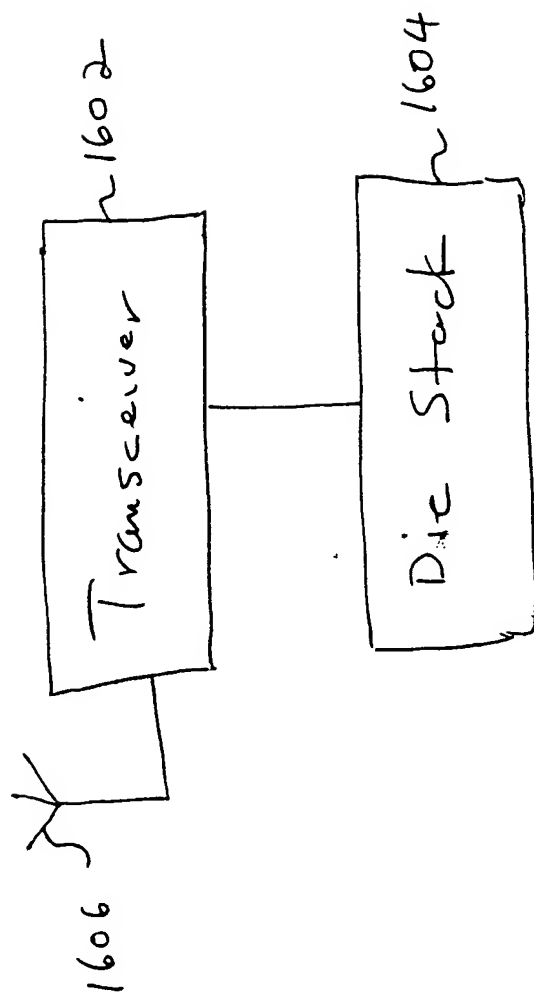


Figure 16